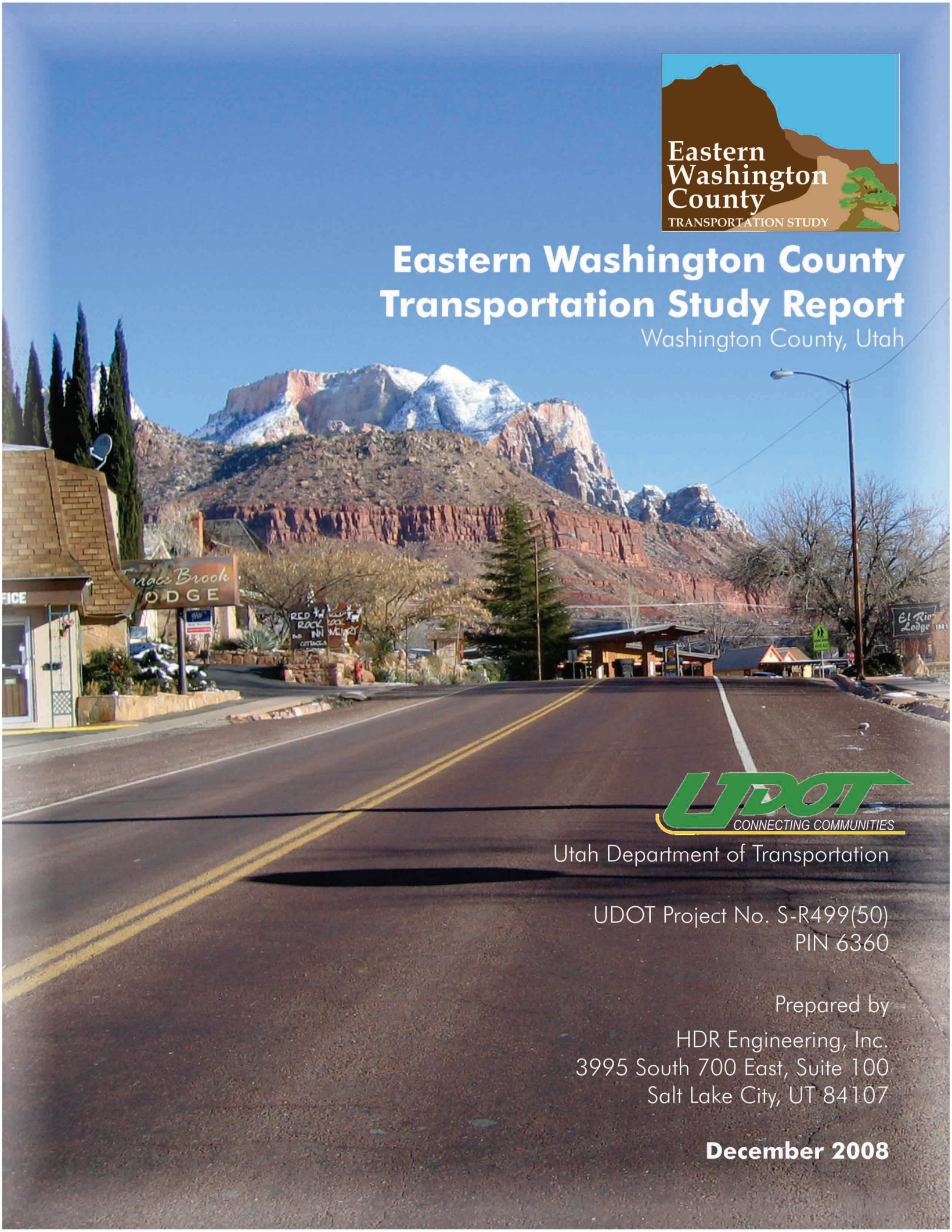


Eastern Washington County Transportation Study Report

Washington County, Utah

Utah Department of Transportation

UDOT Project No. S-R499(50)
PIN 6360

Prepared by

HDR Engineering, Inc.
3995 South 700 East, Suite 100
Salt Lake City, UT 84107

December 2008

Tables

Figures

Appendices

1.0 Introduction

The Utah Department of Transportation (UDOT) recognizes the importance of the transportation system in eastern Washington County, Utah, and commissioned a study (the Eastern Washington County Transportation Study, or EWCTS) to formulate strategies for meeting the long-term needs of the public and for developing efficient transportation facilities in the area. This report, which summarizes the results of the study, provides recommendations for improvements to three transportation corridors: State Route (SR) 9, SR-17, and SR-59. This report also summarizes the existing conditions of the highways, describes the environmental setting where the highways are located, provides recommendations for implementing improvement projects, and provides cost estimates for some of the recommended projects.

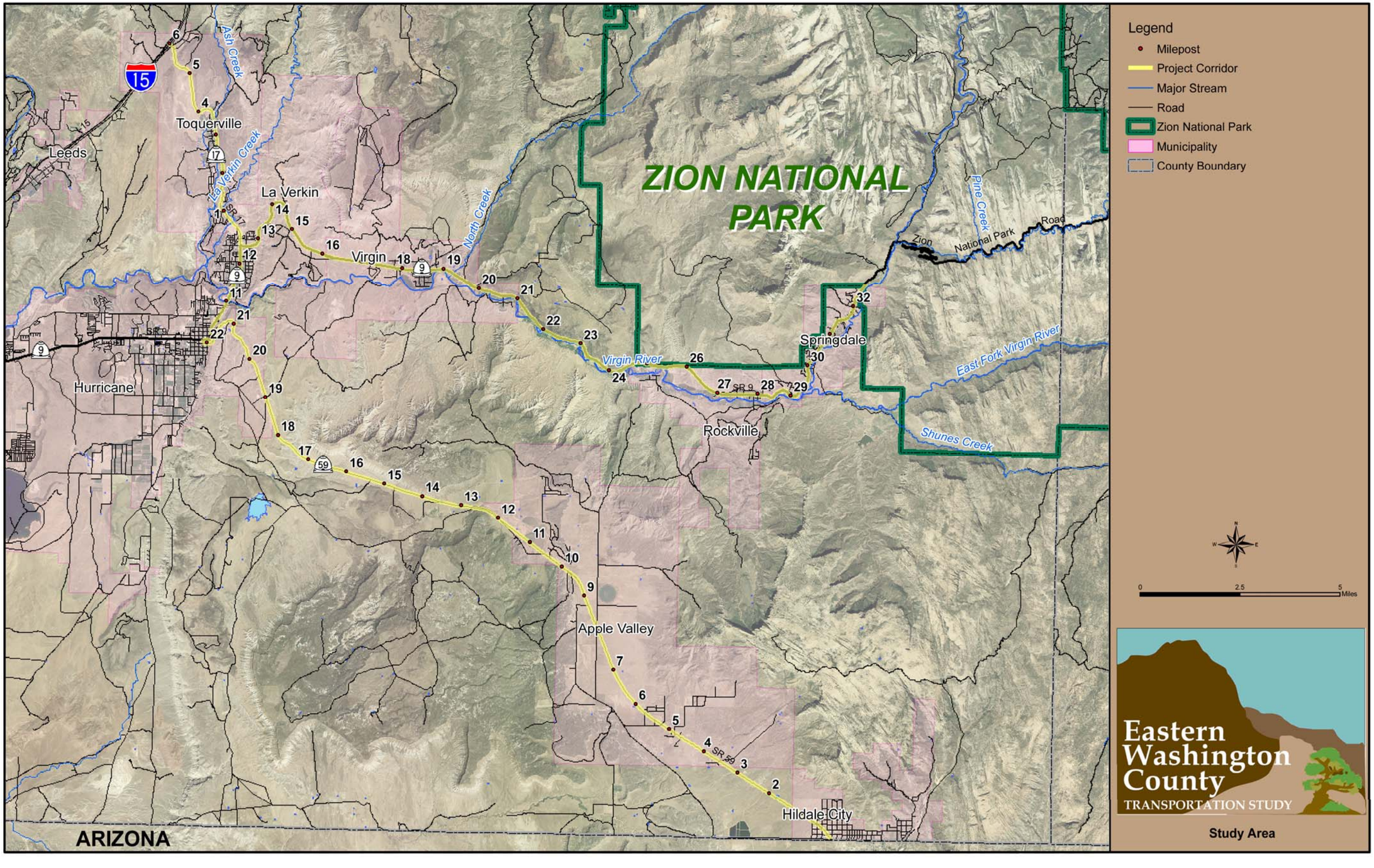
UDOT used a collaborative process to complete the transportation study that involved seeking input from affected local governments, state and federal agencies, user groups, property owners, and business operators. The intent of the study was to develop a plan that identifies transportation needs and prioritizes potential solutions (project recommendations) for the three corridors. The study addressed needs through about 2035.

1.1 Overview of the Study Area

This study report focuses on the condition of and needs along SR-9 from Hurricane to the Zion National Park boundary in Springdale, all of SR-17, and all of SR-59. The segment of SR-9 in the study area runs generally east-west for about 22 miles (see Figure 1 below). SR-17, which is about 6 miles long, runs north-south between Interstate 15 (I-15) and SR-9. SR-59 runs generally northwest-southeast for about 22 miles, from Hildale at the Utah-Arizona border to Hurricane. In total, the study area includes about 50 miles of state highway.

This page is intentionally blank.

Figure 1. Study Area



This page is intentionally blank.

1.2 Study Process

The corridor study process involved three phases. The first phase focused on gathering information about existing highway conditions, environmental resources in the area, and current land-use patterns. In the second phase, UDOT reviewed future population and traffic projections that would affect how the highways function and that would require highway improvements. Finally, UDOT used the information gathered in the first two phases to complete the third phase, which consisted of identifying a "vision" for the corridors and then developing and ranking a list of improvement projects that would help UDOT meet this vision. This study report focuses on the third phase—the improvement project list—but also summarizes the results of the first two phases.

1.3 Vision, Goals, and Objectives

As part of the corridor study process, UDOT formed a vision for the EWCTS corridors and identified goals that support this vision.

1.3.1 Vision

The state routes that are included in the EWCTS area (SR-9 from Hurricane to Springdale, SR-17, and SR-59) should provide a safe travel route for local, regional, and through traffic to meet personal and commercial needs.

- Corridor design should accommodate the needs of all travel types including passenger vehicles, recreational vehicles, bicycles, and pedestrians as well as the unique requirements of large trucks.
- The corridor should have enough capacity to minimize congestion and facilitate traffic operations.
- Roadway features should be designed and constructed to accommodate safe access onto and off of the highways for all vehicle types and sizes.
- The corridors should be designed and managed to minimize impacts to and enhance the adjacent natural and human environments.

1.3.2 Goals and Objectives

Goal 1: Transportation facilities should be reasonably safe for users.

To achieve this goal, UDOT should focus on:

- Adequate number and length of passing lanes
- Adequate number of safe pull-outs
- Intersection treatments as needed
- Striping and signing as needed
- Standard shoulder widths
- Intelligent transportation system (ITS) technology as needed
- Rumble strips
- Roadway geometry
- Bicycle and pedestrian considerations
- Parking restrictions

Goal 2: Operational and capacity improvements should minimize delay and improve safe and efficient movement of traffic.

To achieve this goal, UDOT should focus on:

- Adequate number of travel lanes for expected volumes
- Adequate number and placement of auxiliary/turn lanes
- Adequate sight distance
- Maintenance of existing surfaces and structures
- Adequate lane and shoulder width

Goal 3: Incorporate roadway improvements to balance regional traffic flow and reasonable access to land development.

To achieve this goal, UDOT should focus on:

- Access control
- Corridor Agreements with local governments
- Developer responsibility for design and build of appropriate intersection/interchanges to access the state highway
- Coordinated land-use planning with local government agencies
- Maintenance of regional traffic flow

Goal 4: Corridor design should minimize impacts and enhance benefits to the natural and human environments where possible.

To achieve this goal, UDOT should:

- Implement context-sensitive solutions (CSS) that minimize impacts and enhance the natural and built environments
- Minimize impacts to adjacent natural, physical, archaeological, historical, cultural, and human resources
- Include opportunities for public involvement during project planning

1.4 Document Organization

This corridor study report includes the following sections:

Section 1.0: Introduction

Section 2.0: General Description of the Study Corridors

Section 3.0: Future Conditions in the Study Area

Section 4.0: Public Involvement

Section 5.0: Project Identification and Recommendations

Section 6.0: Implementation Plan and Cost Estimates

Section 7.0: References